



## Going Beyond Compliance

Effectively managing stimulus funds today, while creating more lasting business value tomorrow





# Executive summary

Thanks to the 2009 American Recovery and Reinvestment Act (ARRA), public infrastructure is receiving a major infusion of federal dollars. Since the plan was first announced, there has been considerable debate over how to ensure that the nation spends the stimulus dollars wisely, avoiding some of the more egregious fraud, waste, and abuse problems that have plagued earlier emergency spending initiatives.

The accountability concerns are well founded. Capital projects traditionally face large risks, often resulting in cost overruns, time overruns — and sometimes even outright fraud and corruption. Such risks increase exponentially when huge sums of public dollars need to go out the door quickly.

Previous experiences indicate that the pressure to move quickly in the face of a crisis situation vastly increases the likelihood of fraud, waste, and abuse. In our review of Katrina and Rita recovery, Iraq reconstruction, and dozens of large capital projects, we found five recurring types of waste: cost overruns; time overruns; cancelled projects; poor project selection; and lack of competitive pricing. Common forms of fraud included bid rigging; false claims; cross-charging; and bribery, corruption, and kickbacks.

To prevent large amounts of fraud, waste, and abuse from derailing ARRA, it is critical for every organization receiving substantial ARRA funds to get the basics right — from planning all the way through to closeout audits — and then to effectively execute them. Getting the basics right can help to reduce waste, fraud, and other incidents that will tarnish the reputation of the spending agency.

Only after the basics are in place can program management and anti-fraud program controls be further strengthened by utilizing more innovative management and technology practices, including:

- Using scenario planning to determine all the combination of things that can go wrong when you are rolling out multiple projects at great speed.
- Adopting a portfolio management approach to identify synergies among projects that can be effectively delivered within the time frame allotted.
- Transforming financial operations and processes to collect and report financial performance data on a real-time basis.
- Using innovative procurement models to shift the risks and incentivize performance.
- Putting everything — contracts, expenses, project details, and the like — up on the Web for public consumption, and making it searchable.
- Using social media tools to facilitate a meaningful two-way conversation with the public about how stimulus funds are being spent.
- Employing analytics tools to transform the volumes of raw data collected into useful information.
- Developing a collaborative workspace to facilitate interagency and intergovernmental information sharing and collaboration in real time.

Using these innovative techniques can help to mitigate the amount of fraud, waste, and abuse in the ARRA program while optimizing performance. Moreover, diffusing these innovations throughout the organization can enhance overall agency performance long after ARRA funds run out.

Huge amounts of time and effort are going into building the capability to administer and comply with ARRA. If this capability is not utilized properly and sustained beyond ARRA, a big opportunity will be wasted to create more lasting value for government agencies at the state, local, and federal levels.

# Introduction – Compliance and beyond

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“Experience tells us that the risk for fraud and abuse grows when billions of dollars are going out quickly, eligibility requirements are being established or changed, and new programs are being created.”

– Government Accountability Office, March 2009

Thanks to the 2009 American Recovery and Reinvestment Act (ARRA), signed into law in February 2009, public infrastructure is receiving a major infusion of federal dollars. As President Barack Obama noted, the goal of the infrastructure plan is twofold: to create jobs now and to pave the way for continued economic prosperity into the 21st century.

Since the plan was first announced, there has been considerable debate over how to ensure that the nation spends the stimulus dollars wisely, avoiding some of the more egregious fraud, waste, and abuse problems that have plagued earlier emergency spending initiatives.

The accountability concerns are well founded. Capital projects traditionally face large risks, often resulting in cost overruns, time overruns — and sometimes even outright fraud and corruption. Boston’s Big Dig infrastructure project, for example, saw costs soar from an estimated \$2.6 billion to \$14.6 billion, thanks at least in part to contractors overcharging for concrete and other materials. This was but the most high-profile example of an endemic problem for capital projects — both large and small. Poorly managed projects waste tax dollars, trigger front-page headlines, and cost people their jobs and often their reputations.

Such risks increase exponentially when huge sums of public dollars need to go out the door quickly. In Iraq there are, for example, 154 open criminal investigations into allegations of bribery, conflicts of interest, defective products, bid rigging, and theft stemming from reconstruction efforts. At least 35 people have already been convicted of criminal misconduct in the course of the reconstruction program.<sup>1</sup> Meanwhile, the rush to respond to the devastation of Hurricane Katrina resulted in, among other things, \$2.7 billion spent on mostly no-bid contracts for 145,000 trailers — 8,000 of which went unused.<sup>2</sup>

ARRA mandates that governments spend money quickly. “We’ll invest your precious tax dollars in new and smarter ways, and we’ll set a simple rule — use it or lose it,” explained President Obama in announcing his plan. “If a state doesn’t act quickly to invest in roads and bridges in their communities, they’ll lose the money.”

This need for speed carries significant risks. Governments under pressure to fund projects swiftly might choose projects with limited returns, while forgoing those that will have a more lasting impact on the country’s physical infrastructure. Hasty action can also breed carelessness, resulting in billions of tax dollars down the drain. Earl Devaney, chairman of the Recovery Accountability and Transparency Board, reported to Congress that around 7 percent of all government spending is lost to fraud and abuse.<sup>3</sup>

Senator Joseph Lieberman, chairman of the Senate Homeland Security and Governmental Affairs Committee, summed up the challenge facing government leaders: “If Americans start hearing stories about how their money is being wasted on pet projects or funneled to favorite contractors or flat out lost to fraud or theft, faith in government at all levels and support for the overall program will erode — no matter that other parts of the program are successful.”<sup>4</sup>

To reduce the likelihood of that happening, ARRA contains unprecedented transparency and accountability requirements. Complying with these requirements is essential to ensure that stimulus funds reach their intended destination and produced the desired results. Being satisfied with just baseline compliance, however, misses an important opportunity to create more lasting value for government agencies at the state, local, and federal levels. While ARRA is a short-term economic recovery program, the program does create an opportunity for agencies to utilize innovative approaches to improve how they do business — a benefit that can continue long after ARRA has ended. Improving compliance can help to limit the fraud, waste, and abuse problems seen in the past, but going beyond compliance enhances the capacity to create value in the long term.

The purpose of this report is to help government agencies manage the tidal wave of stimulus funds, first by getting the compliance basics right and then by building more robust operational capacity. This is critical to preventing ARRA funds from going the way of other emergency spending initiatives that were marred by unacceptably high levels of fraud, waste, and abuse.

We start by looking at the problem of fraud, waste, and abuse and taking stock of lessons learned from previous initiatives.



# The problem of fraud, waste, and abuse

When it comes to fraud, waste, and abuse, what lessons do previous experiences provide to those administering the ARRA funds?

**Waste and abuse**

A lot of ink has been spilled on the issue of waste and abuse. And yet it remains something of an amorphous concept. What exactly constitutes “waste” in government? And what kinds of waste and abuse are most likely in some of the areas where the most stimulus money is being spent?

In our reviews of Katrina and Rita recovery, Iraq reconstruction, and dozens of large capital projects, we have found five recurring types of waste (see below and table 1).

**Cost overruns.** Cost estimates for capital projects are often inaccurate to begin with. Scope creep and ever-changing requirements exacerbate the problem. Underestimating the costs and complexity of ARRA projects may put serious strain on government coffers if cost escalation puts Recovery Act funds at risk of deobligation or if commitments are not sustainable after ARRA funds run out.

**Time overruns.** When projects run longer than anticipated, costs increase. Time overruns on ARRA projects will likely be more damaging than for regular projects. Reason: ARRA funds may dry up before the project is completed, saddling agencies with unfinished projects.

**Table 1. Common sources of waste in large infrastructure projects**

| Type of waste                      | Examples of waste and abuse   | Potential warning signs   |
|------------------------------------|---|---|
| <b>Cost overruns</b>               | <p>A study covering transport infrastructure projects across 20 countries shows that 9 out of 10 fall victim to cost escalation.<sup>5</sup> The study concludes that cost overruns have not come down over the last 70 years.</p> <p>A global study of IT projects over a seven-year period (1999–2005) concluded that 51 percent of all projects experience cost and time overruns.<sup>6</sup></p> | <ul style="list-style-type: none"> <li>• Unreliable cost estimates</li> <li>• Scope creep</li> <li>• Unclear and changing project requirements and milestones</li> <li>• Lack of clearly stated decision points</li> <li>• Poor planning</li> </ul>   |
| <b>Time overruns</b>               | <p>A Federal Transit Administration analysis shows that in transit projects, inflation is “the biggest single factor in the difference between predicted and actual capital costs” as the gap between original schedule and implementation increases. Inflation accounts for close to 40 percent of the cost variation.<sup>7</sup></p>   | <ul style="list-style-type: none"> <li>• Overambitious initial deadlines and goals</li> <li>• Changes to the plan in the middle of a project</li> <li>• Lack of internal capacity to effectively administer complex projects</li> </ul>   |
| <b>Cancelled projects</b>          | <p>In the United Kingdom, a series of written responses to Parliament in 2008 revealed that £273 million worth of major IT projects were cancelled in the past five years.<sup>8</sup></p>  | <ul style="list-style-type: none"> <li>• Lack of accountability and inadequate oversight</li> <li>• Strategic, regulatory, and technological uncertainty</li> <li>• Unclear vision</li> <li>• Change in leadership</li> <li>• Shift in strategic goals</li> <li>• Poor contract management</li> </ul> |
| <b>Poor project selection</b>      | <p>The 25,000 manufactured homes purchased for Katrina victims were never used because government regulations prevented their installation in flood plains.<sup>9</sup></p>   | <ul style="list-style-type: none"> <li>• Need to spend dollars quickly</li> <li>• Poor planning</li> <li>• Politically driven selection criteria</li> </ul>   |
| <b>Lack of competitive pricing</b> | <p>The Government Accountability Office (GAO) estimates that as much as \$16 million was wasted during the Hurricane Katrina recovery because task orders were not issued to the contractors with the lowest price.<sup>10</sup></p>  | <ul style="list-style-type: none"> <li>• Lack of competitive bidding</li> <li>• Inadequate pricing</li> <li>• Pricing errors</li> <li>• Duplicate payments</li> <li>• Payments for work not performed</li> </ul>  |

**Cancelled projects.** Many high-profile projects that start with great fanfare end up being eventually abandoned. Projects that balloon into big failures and are eventually abandoned will likely generate mounds of negative publicity given the transparency requirements in the Recovery Act.

**Poor project selection.** One proximate cause for cancelled projects is poor project selection. This problem is exacerbated when events unfold fast and a huge amount of spending is involved. This issue is of prime concern for the Recovery Act — projects not ready for implementation may be billed as “shovel ready” in order to attract federal funds.

**Lack of competitive pricing.** Another frequent form of waste occurs when the lack of a competitive procurement leads governments to pay more than what is required to complete a project.

## Fraud

Fraud risks increase exponentially when speed is imperative and huge sums of public money need to go out the door quickly. Employees may be tempted to get rich quickly, sometimes in collusion with third parties, such as vendors and contractors.

Most cases of fraud in the Iraq reconstruction program were a result of inadequate mechanisms to prevent it. The key factor, as noted in the recent report on Iraq prepared by the Special Inspector General for Iraq Reconstruction (SIGIR), was “insufficiently defined contracts.”<sup>11</sup> While most companies behaved responsibly under extremely dangerous circumstances to comply with the contractual requirements as best as they could, some used the opportunity to benefit from fraud. While dollar amounts lost to fraud are usually not as large as those lost to waste and abuse, cases of fraud often generate more negative publicity and result in greater loss of public trust.

Four risk factors for fraud can potentially impact projects financed by the Recovery Act (see table 2).

**Table 2. Common sources of fraud in large infrastructure projects**

| Type of fraud/abuse                       | Examples of fraud   | Potential red flags  |
|---|---|--|
| <b>Bid rigging</b>                        | The Justice Department’s Antitrust Division has recovered more than \$4 billion in fines for bid rigging since 1997. <sup>12</sup>  | <ul style="list-style-type: none"> <li>• Cartel formation</li> <li>• “Cover bids,” which are designed to fail on technical and financial requirements</li> <li>• Inadequate participation</li> <li>• Quoting unrealistic and high prices</li> <li>• Sharing of bid information by contractors</li> </ul>   |
| <b>False claims</b>                       | A GAO report estimates that over \$1 billion in Katrina victim assistance may have been lost to fraudulent payments. Aid recipients seem to have used the money to buy professional football tickets and Caribbean vacations. <sup>13</sup> | <ul style="list-style-type: none"> <li>• Inadequate capacity to monitor contractor performance</li> <li>• Inadequate staff training and awareness on proper documentation and review procedures</li> <li>• Lack of systems and procedures to verify the veracity of claims submitted</li> <li>• Lack of automation to track and audit invoice</li> </ul> |
| <b>Cross-charging</b>                     | Cross-charging has been identified as the most common type of fraud committed in defense procurement contracts. <sup>14</sup>   | <ul style="list-style-type: none"> <li>• Inadequate cost monitoring and tracking mechanisms</li> <li>• Inability to proactively monitor and forecast costs and schedule variance</li> <li>• Duplicate payments systems and procedures that do not correlate with each other</li> </ul>   |
| <b>Bribery, corruption, and kickbacks</b> | Nearly 10 percent of the \$4 trillion spent annually around the globe on public and private construction projects — about \$400 billion — is lost to corruption. <sup>15</sup>  | <ul style="list-style-type: none"> <li>• Inadequate internal audit resources</li> <li>• Weak whistleblower protection policies</li> <li>• Lack of business intelligence on prime contractors</li> <li>• Overly complex contractual structures</li> <li>• Inadequate oversight of contractors and their subcontractors</li> </ul>                         |

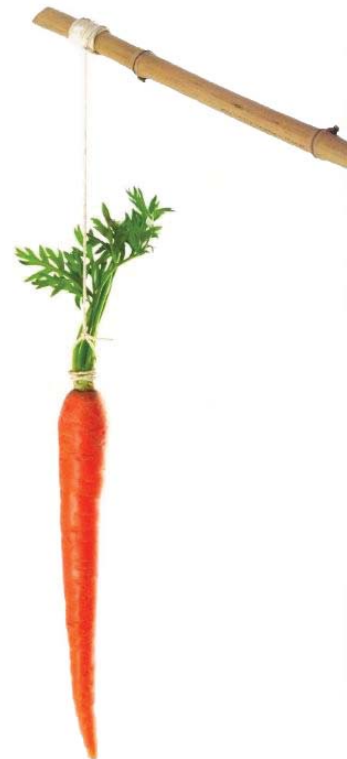
**Bid rigging.** Bid rigging is an advance agreement between contractors on the bid price to select the winner. Bidders may take turns at being the successful bidder, a practice referred to as “bid rotation.” With enough ARRA funding to go around, some contractors may consider it better to share the spoils than to compete between themselves. Normal review procedures and control mechanisms designed to detect bid rigging may be compromised to comply with ARRA’s speed requirements.

**False claims.** False claims typically involve manipulating eligibility criteria or requesting payment for work that was not performed. It may also include vendors submitting false documentary evidence to support nonexistent sales or services never rendered, leaving equipment longer on the site than needed, doing substandard work, or inflating invoices for materials. Adding to this risk is the fact that many government agencies have scaled down their contract acquisition and managerial staff in recent years. It will be a challenge to build this capacity again for the short run at the scale that ARRA will demand.

**Cross-charging.** When a company has both “fixed-price” and “cost-plus” contracts (where profits can be made on costs), there is an incentive to shift the costs from the former to the latter. While ARRA favors “fixed-price” contracts, it does not prohibit “cost-plus” contracts, meaning governments need to be on the lookout for this practice. Because agencies are expected to track ARRA funds separately, duplicate accounting procedures and systems to track expenditures may actually make it more difficult to detect fraud in non-ARRA “cost-plus” contracts. That is, contractors may bid low on Recovery Act projects with “fixed-price” contracts and then shift costs to ongoing “cost-plus” contracts that they have for non-Recovery Act projects.

**Bribery, corruption, and kickbacks.** Bribery, corruption, and kickback fraud can take many forms, among them: “gratuities” to buyers to secure sales; payments to “shell companies” for services never rendered; or kickbacks to individuals for preference over other service providers. Kickbacks often involve setting qualifications so that only certain bidders can win. Internal controls — both preventative and detective — may be the first line of defense against corruption. However, quick ramp-up of this capacity will require additional resources.

It is not easy to recoup dollars lost to fraud. The capacity of many government agencies to detect and investigate fraud has declined in recent years, with dwindling numbers of auditing, contracting, and acquisition personnel in many public agencies since the mid-1990s, despite the steady rise in government spending.<sup>16</sup> Building new capacity quickly is not easy; it takes years to acquire the professional expertise and judgment to decipher fraud schemes. It is, therefore, important to prevent fraud by learning from the past and reacting quickly to new patterns of fraud.



# Compliance – Getting the basics right

Many government agencies are confident in their abilities to manage Recovery Act dollars. Why shouldn't they be? Many of them already have sophisticated systems in place to manage a pipeline of federal dollars. While true, the vulnerabilities of these systems remain under appreciated. These systems were not necessarily designed to handle the volume coming down the pike thanks to ARRA.

## Lessons in big and fast

Among other things, the response to Hurricane Katrina illustrated that standard processes were not designed to deal with such a large and complex input and broke down under pressure. While federal acquisition regulations allow for sole-sourced contracts in certain instances, this exception became the norm in the wake of Hurricane Katrina and consequently invited significant criticism. As of June 2006, nearly a year after the hurricane struck, only around a third of the recovery and reconstruction contracts (valued at upwards of \$10.6 billion) had been awarded with full and open competition.<sup>17</sup>

While public administrators have a good command of the basics when it comes to overseeing public programs and ensuring that controls are in place to protect tax dollars, pulling everything together when speed and scale are added to the equation can challenge even the most competent of administrators. In reviewing the shortcomings of both the Iraq reconstruction program and the Hurricane Katrina response and recovery effort, what stands out is the absence of many of the most basic project governance elements, which has exposed both initiatives to the possibility of significant cases of fraud, waste, and abuse.

To prevent similar problems from derailing ARRA, it is critical for every organization receiving substantial ARRA funds to have the basic components of an effective governance framework in place, from planning all the way through to closeout audits, and then to effectively execute them (illustrated in figure 1). In designing a stimulus risk management and controls program, it's important to keep in mind the areas where earlier emergency spending initiatives broke down, as well as new transparency and accountability requirements attached to Recovery Act funds.

Figure 1. Establishing a governance framework for compliance and project delivery



## Plan

**Clearly define the goals of the program.** Ill-defined goals create problems when programs are implemented. The goals of the Iraq reconstruction program were not clear: Was the goal to create necessary infrastructure? Was it to employ Iraqis? Or was it to build local capacity for construction and maintenance? If the goals had been clearly articulated at the outset of the program, and built into the implementation program, the problems with abandoned or difficult-to-transfer projects could have been avoided. As a result of the lack of clarity about what the goals of the program actually were, a number of projects failed after they were turned over to the Iraqi government, which lacked the capacity to manage the facilities developed.

**Keep it simple.** Resist the urge to make your stimulus program overly complex. Complexity adds little in the way of value and creates confusion, which is a breeding ground for fraud, waste, and abuse. If guidelines are complicated, then they are subject to interpretation by people in the field or to circumvention altogether. Err on the side of simplicity when you are defining expectations and when developing processes to monitor and deliver on those expectations.

**Establish accountability and transparency early.** ARRA funds come with many unique requirements that go beyond normal practices. To ensure compliance with ARRA program requirements, build the timelines for obligating funds and awarding grants, as well as progress reports, into your master schedule at the outset. Clearly articulate the objectives for all ARRA funds, the criteria for receiving such funds, and the conditions attached to the use of funds. Determine what data will be collected, how often, what format it will take, and how it will be tracked separately from non-ARRA funds in financial systems. Establishing these ground rules at the outset will help to ensure consistency throughout the program, preventing program administrators from having to go back and reconcile any discrepancies down the road (which will be inevitable if definitions and parameters are constantly in flux).

## Execute

**Clearly define requirements.** In a rush to meet the deadlines and get the Recovery Act funds released, government agencies may end up writing inadequately defined contracts, making them susceptible to waste and fraud. After Hurricane Katrina, sole-sourced contracts were expedited, some without adequate definition of the work expected from contractors. In some cases, cost estimates were inaccurate, or done by individuals that were not qualified to make such estimates. As a result, under performance and overpricing were problems in some jurisdictions.

**Scale operations/Build surge capacity.** ARRA presents an opportunity to reduce the country's infrastructure gap by bringing forward thousands of backlogged projects. But every silver lining has its cloud. Few government organizations have the personnel or systems in place to effectively manage the dramatically higher levels of spending. The surge capacity needed to oversee all these additional projects simply isn't there. The ARRA has, for example, more than quadrupled one federal agency's annual budget for construction and renovation, making it extraordinarily difficult for the agency to handle the increased volume without outside help. Without the manpower needed to perform due diligence and effective contract oversight, government agencies risk selecting subpar projects and contractors, setting the stage for problems down the road.

**Improve intergovernmental cooperation.** Unlike the unified military command during the war, determining which agency was in charge of post conflict reconstruction in Iraq was constantly in dispute. More than 60 offices and agencies were managing operations, each pursuing its own goals, with little in the way of structures or information systems to coordinate their efforts. Predictably, the effort suffered as a result. Today, many officials are deeply concerned that the ARRA funds will be disbursed either without appropriate controls or with such inflexible controls that recipients will find it impossible to spend the money. For ARRA to be successful, state and local jurisdictions must have enough flexibility to spend stimulus money in accordance with the spirit of the law, and sufficient controls, including audits and sanctions, to ensure proper accountability for how ARRA dollars are spent.

## Control

**Track dollars at the beginning.** In the rush to transfer sovereignty to the Iraqis, billions of dollars were spent without adequate mechanisms in place to track where funds went. Ad hoc organizations, like the program management office set up to manage the program, lacked the requisite staff and systems to administer the funds effectively, resulting in expenditures of \$20 billion tracked on Excel spreadsheets, without a detailed accounting of how funds were spent. Getting the money out fast and worrying about how it would be tracked later, resulted in a painstaking effort to go back and retroactively determine where funds actually wound up. With ARRA, having clear tracking mechanisms in place at the outset is essential for ensuring that Recovery Act dollars reach their intended destination.

**Build your systems for the long haul.** By the time closeout audits are completed and disputes resolved, it may be 2030, and possibly beyond, before the state of Louisiana and the federal government can close the books on the Katrina recovery effort. To ensure that your agency's processes can survive until closeout audits have been performed and postmortems have been completed, they should not be ad hoc, but rather, designed with an eye toward sustainability.

**Don't make risk management a one-time exercise.** Risk management is not just a one-off exercise to be conducted at the outset of a project. It's an ongoing practice that helps to identify and mitigate new risks as they emerge. Because risk drivers typically change as a project progresses, new strategies should be developed and deployed to meet these evolving threats. Start by mapping and prioritizing the risks, identifying controls to mitigate the occurrence or impact of high-priority risks, and then implementing the mitigation strategies. Then, regularly refresh your strategy to keep pace with evolving risks. In addition to managing project-specific risks, agencies must also manage fraud risks, which require a separate set of programs and controls specifically designed to address fraud risks (see inset).

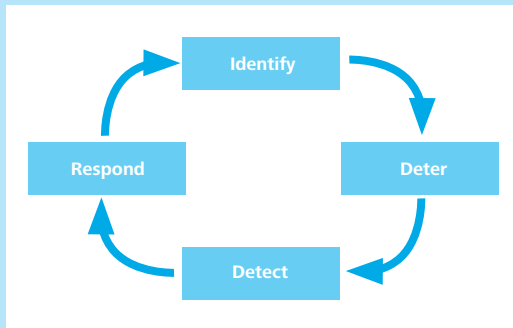
Is your agency on track to effectively manage ARRA funds? Here's a checklist of readiness success factors to run through when crafting your agency's stimulus program.

- States' efforts are coordinated to maximize the benefits received without duplicating requests.
- Requirements associated with the ARRA stimulus funds are understood at the state, agency, and local government levels.
- Systems are configured to address reporting requirements.
- Performance metrics are defined and monitored to ensure compliance.
- Adequate capacity exists to effectively manage Recovery Act funds.
- Internal controls are operating to ensure accurate and timely reporting of required data.
- Risk assessment practices are consistent and effectively implemented to identify, assess, and mitigate project risk and the risk of fraud, waste, and abuse.

These readiness factors should be checked and retested early on. Don't wait until after the bulk of funds have already gone out the door.

### Anti-Fraud Programs and Controls

Anti-Fraud Programs and Controls (AFPCs) are specifically designed to identify, deter, detect, and respond to potential fraud risks.



**Identify.** ARRA will bring additional funding and potentially new project types to an agency’s grant programs. The agency should identify key personnel to participate in brainstorming sessions to identify and evaluate fraud risks. These brainstorming sessions should include personnel from multiple departments (such as program, contracts, and finance) to facilitate a broad discussion of potential risks. Once identified, the possible fraud risks should be assessed for potential significance and likelihood of occurrence. This will enable the agency to focus on mitigating significant vulnerabilities.

**Deter.** Once potential fraud risks are identified, Agencies should take steps to deter the associated fraud schemes. This could be achieved through establishing or updating existing preventative controls (such as

comparing potential grantees to lists of known “bad actors”). Agencies should conduct training to inform their employees of potential schemes so that they are better positioned to identify indicators of potential fraud before it occurs. Additionally, agencies should publicize the existence of their AFPCs and components of the program. Fraudsters may be less likely to attempt a scheme if they know that an agency is actively working to prevent potential fraud.

**Detect.** Because it is inevitable that some fraud will occur, agencies must have detective controls and measures in place to identify perpetrated schemes and react accordingly. A critical component of this step is monitoring whistleblower lines because they are often a source of fraud identification.

**Respond.** Agencies should actively report their successes and findings related to combating fraud. Not only will this inform the public and enhance transparency, but lessons learned from detected fraud should be used to inform future AFPC efforts. Incorporating perpetrated schemes — both within an individual agency as well as relevant schemes identified at other agencies — will make the next brainstorming session more robust and further enhance the agency’s AFPCs.

Only after the basics are in place can your program management and anti-fraud program controls be further strengthened by utilizing more innovative practices, a subject to which we now turn.

# Going beyond compliance – Adopting innovative practices

Getting the basics right can help to reduce waste, fraud, and other incidents that will tarnish the reputation of the spending agency. Huge amounts of time and effort are going into building the capability to administer and comply with ARRA. If this capability is not used properly or sustained beyond ARRA, a big opportunity will be wasted. Governments can use the stimulus event to transform their organization and create more value instead of going back to business as usual after the ARRA funds are spent. Moreover, the strong transparency and accountability requirements mandated by the Recovery Act will likely become standard operating practice from here on out.<sup>18</sup> The more governments get their act together now, the more prepared they will be in the future for the coming transparency revolution.

What does going beyond compliance actually entail? It means principally two things: First, using new innovative techniques to mitigate fraud, waste, and abuse. Second, diffusing these innovations and all the other improved practices developed for ARRA compliance throughout the organization to enhance overall performance and risk intelligence.

The innovative practices can be broken down into two categories: management practices and technology tools (see figure 2).

### Innovative management practices

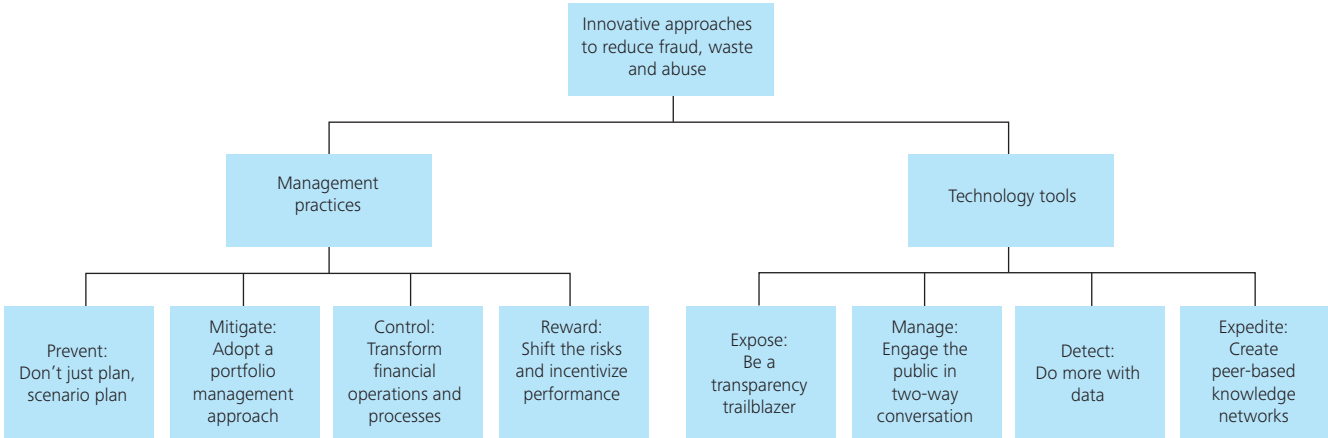
#### Don't just plan — scenario plan

As the events in Iraq unfolded, this assumption of course proved illusory. The reconstruction strategy was based on the assumption of a peaceful environment. The administration wasn't prepared for the complete chaos after the swift military victory. When confronted with repeated attacks, violent insurgency, and a quickly shifting political landscape, the planners took to ad hoc measures. From employing more Iraqis, getting the oil flowing, building up troops to secure locations, to focusing on agriculture — the entire program kept shifting priorities which, in turn, led to waste. In the end, the U.S. mission shifted to rebuilding everything from scratch as opposed to restoring essential services for a quick transfer of power.

“The plan assumed the best-case reconstruction scenario...”

– Special Inspector General’s Iraq report on Iraq reconstruction<sup>19</sup>

Figure 2. Innovative practices to reduce fraud, waste, and abuse



One way to avoid falling into this trap is to role play how those affected by stimulus funding might exploit the program to their benefit. Key individuals on the ground may lack situational awareness. Unscrupulous contractors may try to benefit from weaknesses. Try to imagine what all can go wrong when you are rolling out multiple projects at great speed, with little scope for maneuvering requirements and schedules. Figure out ahead of time how to deal with contingencies, should projects not run according to plan.

Such role-playing and scenario planning has long been a mainstay of military strategists. Scenario planning is also used in the corporate sector. Shell Oil's renowned Global Scenarios, used for over three decades, have helped the company explore different potential business environments.

**Adopt a portfolio management approach**

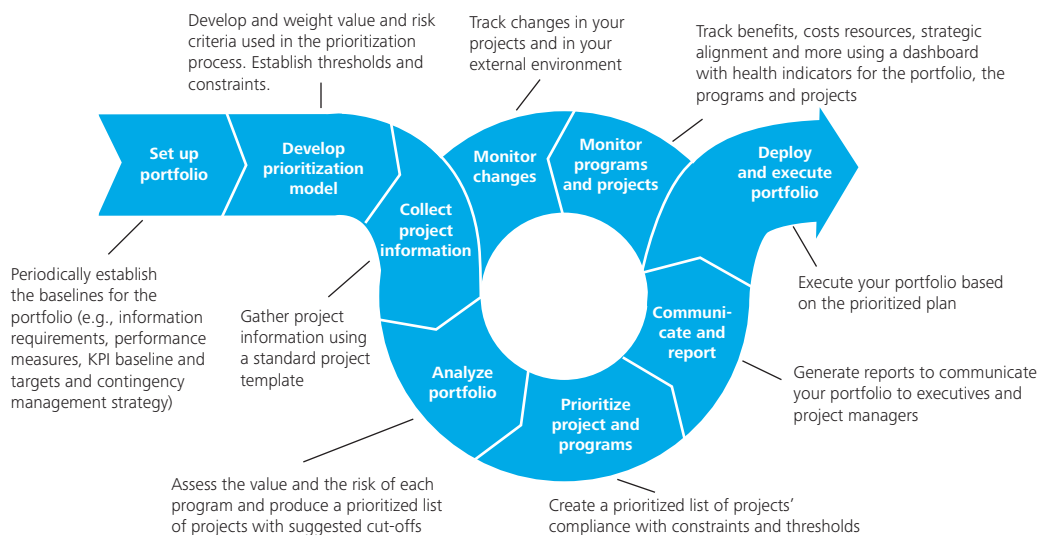
The diversity of projects eligible for ARRA funding means that the policy aims of some projects may be at odds with others. If you don't pay attention to the whole capital program, some projects might reduce, or even wipe out entirely, the benefits of others. For example, a highway construction project might solve a capacity problem in a transportation corridor, but it probably also will attract more drivers, hampering a second project aimed at reducing pollution.

A portfolio management approach can help to address this problem by identifying synergies among projects that can be effectively delivered within the time frame allotted (see figure 3). To achieve synergy, projects should be evaluated in terms of how they support one another. Selecting complementary projects can help to maximize their impact. During the evaluation, think through the impact that a project might have on one or more other projects. If that impact is negative, figure out how to reduce it.

Portfolio management can also help to address another issue caused by the large number of projects coming down the pike: some ARRA-funded projects will fail. The sheer volume of projects means that even with the best controls some will fail outright or will experience significant problems, such as cost and time overruns.

The key thing is to avoid chasing bad money with good money. Without an effective approach to identify waste and other risks early, government agencies often continue to invest in projects despite clear indications that they are headed for failure. It is preferable to target resources on those projects that can actually deliver value rather than waste funds on projects that are not performing well.

**Figure 3. Managing a project portfolio**



A novel approach for selecting which projects move forward and which don't — before too much money is sunk into them — was developed by Vivek Kundra, now the chief information officer of the U.S. federal government, while he served as the District of Columbia's chief technology officer. In 2008, Kundra launched the Office of the Chief Technology Officer (OCTO) Labs, which takes a portfolio management approach to fund worthwhile projects and kill projects unlikely to deliver.

Employees, including those not on the project, are invited to evaluate a list of projects on how likely they are to finish on time and within budget. Promising projects receive additional investment, while those that are unlikely to meet their goals are targeted for fixing or eventually shut down if not salvageable. Through this approach, the aggregated wisdom of employees working in the trenches increases the likelihood of funding projects that are most likely to succeed.

#### ***Transform financial operations and processes***

ARRA compliance will require tight financial controls throughout the project life-cycle as well as collecting and reporting financial performance data on a real-time basis. Typically, the role of the finance function is to ensure that all legal requirements are met; the books are accurate, and the organization's assets are protected and preserved. While some organizations struggle with these basic capabilities, others fail to make full use of the more strategic roles that finance can play in linking investments to outcomes and in minimizing the risks of errors and fraud.

For chief financial officers, ARRA offers an opportunity to raise the finance function's game and move it from the back office to a more strategic level, while also helping prevent waste and fraud related to Recovery Act projects. The following four areas offer the greatest opportunity:

- **Set strategic priorities:** The finance function can develop project-specific cost-benefit analyses and help to prioritize ARRA investments.

- **Set performance measures and targets:**

Executives overseeing stimulus funds need scorecards to review the progress of ARRA projects and prevent deviation from project goals. Managers need to know how to assess progress and determine whether they are meeting benchmarks to prevent large-scale failures.

- **Assess trade-offs:** It is impossible to set budget priorities without understanding how costs are linked to outcomes. The first step in developing a portfolio management approach for ARRA projects is to assess trade-offs between competing investments by defining what is important from both a "value" and "risk" perspective.

- **Provide financial forecast:** Identifying likely cost and schedule variances ahead of time, along with their causes, and the potential options available to managers, will help managers effectively oversee ARRA funds.

#### ***Shift the risks and incentivize performance***

The best way to prevent waste associated with ARRA projects is for as many projects as possible to finish on time and within budget. This is easier said than done. One way to improve the odds is by using innovative infrastructure financing and delivery models.

Public-private partnerships (PPPs), for example, could potentially help governments to reduce two of the most frequent types of waste in capital projects: time and cost overruns. Well-designed PPPs can ameliorate these problems by transferring certain construction and maintenance risks to the private partner. Payment structures can require the assets to be available and properly maintained over time. The public sector thereby gains greater confidence in the level of its spending commitments over the lifetime of the asset.

Another way to create incentives for projects to come in on time and on budget is through performance-based contracting. Most waste and fraud in capital projects results from poor contracting practices: lack of competitive bidding, vaguely defined requirements, scope creep, and inadequate capacity to monitor contractor performance, to name just a few. Time and cost overruns, the most common forms of wastes, are particularly pronounced with cost-plus and time-and-materials contracts.

The ARRA requires fixed-price contracts awarded through a competitive bidding process to the maximum extent possible. Projects that do not comply with this constraint will be listed in a separate section of the Recovery.gov Web site created by the Accountability and Transparency Board and may face increased scrutiny.

Within this broad framework, public officials will have the freedom to creatively design contractor payments to correspond with certain performance pegs. Incentives to increase productivity, cut costs, and raise service quality can be built into the contract. Incentive-based contracts can shift much of the risk onto the contractor, who is rewarded for productivity improvement and penalized for poor performance or rising costs. Example: After the 1994 Northridge earthquake in Los Angeles, Caltrans, the state transportation agency offered the contractor substantial performance incentives and penalties for rebuilding highway overpasses: a \$200,000 per day bonus for completing the project ahead of schedule and a \$200,000 a day penalty for each day the project was behind schedule.

Because of the streamlined contracting process, repair work began the day after the earthquake. The financial incentives resulted in the overpasses being replaced in a little over two months, 74 days ahead of the June 24 deadline.<sup>20</sup>

### **Innovative technology practices**

#### ***Be a transparency trailblazer — Use “crowdsourcing” to oversee spending***

When citizens are ignorant of how their tax dollars are spent, it is much easier for fraud, waste, and abuse to flourish. Transparency keeps government accountable to citizens who know what, how, and why their government is doing what it is doing.

But the benefits of transparency don't end at good government. At a time of increased demand and dwindling resources, overstretched government agencies need the eyes and ears of the public to help them identify instances of government waste and wrongdoing. This is particularly true in the wake of recent fiscal stress that has led to significant cutbacks in management and oversight capacity in government agencies across the country.

By putting everything — contracts, expenses, project details, and the like — up on the Web for public consumption, and by making it searchable, citizens, together with media outlets and government watchdog groups, can in turn help agencies expose cases of fraud, waste, and abuse.

Besides engendering public goodwill, putting all the raw data online has the added benefit of allowing far more to be done with government data than is currently possible. Others can mash it up and analyze it in myriad ways that make the data more useful to everyone — including government officials responsible for overseeing Recovery Act funds. One can imagine a site, for example, that allows citizens and government officials to map contract awards across all 50 states against the pool of bidders for stimulus projects to see if any patterns emerge that might suggest that bids were rigged and trigger further investigation.

Engaging the public in government work in this way is not unprecedented. The U.S. Patent and Trademark Office has used Web-based tools to reduce a huge backlog in patent applications. Instead of doing all the heavy lifting themselves, patent officers have engaged interested members of the public to provide information and commentary relevant to pending patent applications, dramatically expediting the review process.

In the same way, government agencies can engage the public in helping to decipher underlying relationships in the massive amounts of data that are already being collected around stimulus spending. For this to happen, data collection, reporting, and terminology must be uniform. If they are not, efforts to make sense of the volumes of data will be confounded.

***Real-time responsiveness: Engage the public in two-way conversation***

With a large number of critics waiting for the opportunity to capitalize on the smallest mistake, government agencies understandably worry about the consequences of uploading data to Recovery.gov before they've had the chance to verify its accuracy. They also worry that, lacking appropriate context, small problems could get blown out of proportion. They are concerned that the smallest misstep will inevitably create a public relations nightmare and, with it, draw unfair scrutiny.

To add to the challenge, they must prepare to respond to the hundreds of thousands, perhaps millions, of inquiries, complaints, and suggestions that are likely to come in from citizens responding to President Obama's request for public input on ARRA, overwhelming government inboxes and jamming hotlines.

The problem is reminiscent of the Transportation Security Administration's (TSA) early customer service perception problems. In its early days, the agency was unpopular with the traveling public, and it was initially hesitant to create an online forum for public consumption, fearing that a public blog would only encourage the loudest complainers to sound off and invite negative publicity. Nevertheless, TSA went ahead with it, wanting to harness "the amount of energy that's out there, and...get the passenger and [TSA] on the same side."<sup>21</sup>

The Evolution of Security Web site provided the agency with valuable insights that enabled it to improve customer service. When security officers started making travelers empty their bags of all electronics, not just laptop computers, at several airports across the country, passenger confusion quickly ensued, and complaints about this "requirement" hit the blog. TSA swiftly investigated and issued communications reminding security screeners that Blackberries, iPods, and the like are allowed to stay in travelers' bags. An issue that might have taken weeks to make its way up the chain of command was instead quickly uncovered and resolved in a matter of days.

In the same vein, a public blog created for ARRA could help to respond to citizen input, explain the data (and its shortcomings) and direct tips to the appropriate authority for investigation — all in real time. This would provide agencies with a mechanism for responding to issues before they become overblown, while also ensuring citizens that their input isn't just going into a black box. It could also help to market existing resources, such as 311 lines and Inspector General offices across the country.<sup>22</sup> In short, a public ARRA blog modeled after TSA's Evolution of Security blog could help to facilitate a meaningful two-way conversation about how stimulus funds are being spent that goes beyond the undifferentiated data dump that often does more to confuse than to enlighten.

***Employ tools for fact-based decision making:***

***Do more with data***

Thanks to advances in data analytics, organizations can transform the terabytes of raw data they collect to comply with ARRA into useful information for fact-based decision making.

Over the past several years, this capability has made its way into government, most notably in the area of law enforcement. Police departments in Los Angeles and New York, for example, have adapted a computer statistics program (CompStat) to refine their approach to crime reduction. CompStat, a real-time analytics system, maps crime data to geographic regions to identify where problems exist and help guide decision making about where resources should be deployed to bring down crime rates in those areas.

Many transportation departments across the country already have such tools at their disposal. The BAMS/DSS module of their systems allows transportation officials to analyze vendor, employee, and financial transaction data for anomalies, helping to proactively detect fraud, waste, and abuse. Similar to what the banking industry has done to combat credit card fraud (by monitoring customer spending patterns and generating a warning signal when something seems amiss), transportation officials can, for example, use the analysis functionality of their systems to evaluate bid data for any irregularities which could serve as a red flag for collusion.

With vast amounts of data being collected for the purposes of tracking how Recovery Act dollars are being spent, similar tools could prove to be a godsend for government officials overseeing billions of dollars being spent at lightning speed.

Two sets of data mining techniques can help to identify fraud. The first is based on the assumption that we know what fraud looks like. Say, we know a particular activity cannot in the normal case cost more than \$10 and so any charge above that amount is an “outlier” and a likely case of fraud. In this case, systems are designed to look for specific patterns that could reveal cases of fraud. Predictive modeling, for instance, would throw up the “expected” value of costs and plot it against the actual value. Cases that show a huge discrepancy between the actual and expected value of costs are picked up for further investigation.

The second set of techniques assumes that we do not know what fraud looks like, a fair assumption given the possibility that new forms of fraud will crop up in response to ARRA’S new requirements. Statistical modeling allows activities to be clustered into groups with similar characteristics, which can help unearth potential fraud cases. Fraud cases are likely to look different from “normal” cases and therefore to appear separated from the main groups.

Governments implementing projects funded by the Recovery Act can benefit immensely from these fraud detection tools. They can help focus attention on high-priority fraud and abuse cases and, as a result, make optimal use of scarce resources.

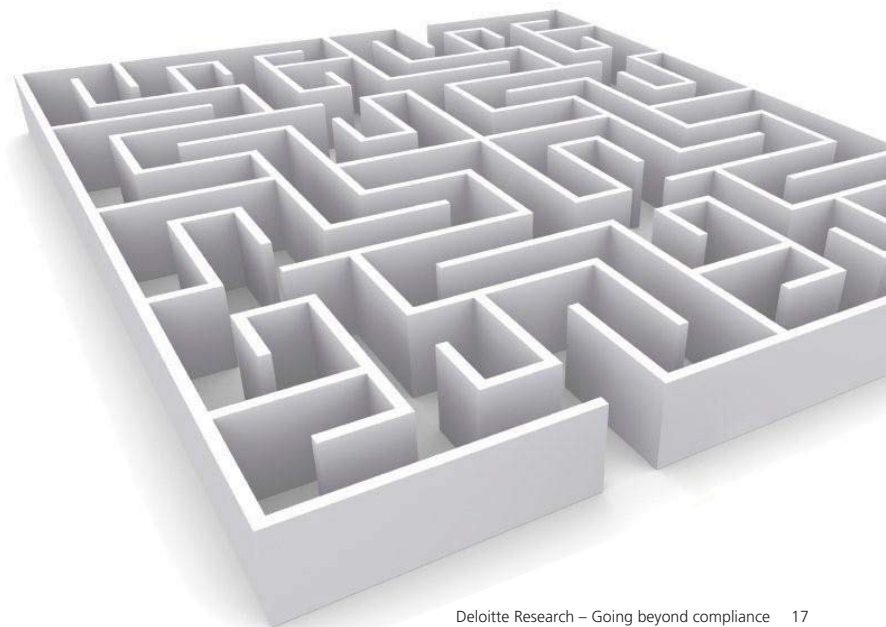
***Get past the bottleneck: Create peer-based knowledge networks***

Dubbed a “bewildering maze” by Sen. Susan Collins, ARRA is anything but straightforward.<sup>23</sup> The Office of Management and Budget (OMB), together with the Vice President’s Office and the GAO, are working to surface and address the torrent of questions and issues that are being raised about the Recovery Act (such as, “Can ARRA funds be used to ramp up management capacity at the state and local level?”) and provide further guidance on implementation. Despite this, confusion remains, and timelines draw nearer as questions go up the chain of command and answers are pushed back down.

While the bottleneck issue is unfortunately not a new one, it challenges the ability of government agencies to comply with ARRA’s speed requirements. Without a more informal platform in place to facilitate interagency and intergovernmental information sharing and collaboration in real time, agencies are not able to tap their peers’ knowledge and learn from one another’s experience. A grant manager in Colorado with a question has no way to find that the same question already came up and was answered in Massachusetts. There is no place to capture and exchange that information so that it can be shared more widely in a timely fashion.

For years, the U.S. intelligence community struggled with similar issues of integrating intelligence collection and expertise spread across 16 separate agencies. To better integrate the network, they created Intellipedia, a collaborative workspace where intelligence officials engage in spirited debate and freely contribute content to reports. Now, more than 37,000 members of the national intelligence community are transforming how intelligence reports get developed through Intellipedia.

Creating a similar platform to help manage stimulus-related issues could facilitate more real-time collaboration between government agencies across the country. This would not only help to alleviate some of the immense pressure on OMB and other agencies responsible for coordinating and managing stimulus efforts but may also help to raise some early red flags for fraud, waste, and abuse. If a project manager in Maine discovers that a subcontractor is charging for work not actually performed, that knowledge could alert other government managers contracting with the same firm to look more closely at their own projects and, if warranted, investigate potential fraud. Such a collaborative platform could also generate some important lessons in networked governance, which can help in dealing with issues like swine flu pandemic that require a similarly agile and robust intergovernmental response.



# Conclusion

In the past, concerns over fraud, waste, and abuse have tended to take a backburner to the imperative for speed.

To prevent that from happening this time, Recovery Act funds are tied to stringent new transparency and accountability requirements. With both political reputations and the risk of deobligation of funds on the line, the inadvertent result may be a shift in focus to eliminating every possible source of fraud, waste, and abuse — at the expense of expediency — or to selecting “easy” projects that add little in the way of lasting economic value.

While the intentions of the new requirements are laudable, it’s important to recognize that the trade-off between speed and fraud, waste, and abuse is never going to be fully eliminated. Nevertheless, it can be

significantly reduced by putting a strong governance program in place, by effectively executing it, and by using innovative management and technology practices to augment normal business operations. Doing so can help to reduce the amount of fraud, waste, and abuse in the short term and prevent ARRA from going down in the history books as another example of mismanaged taxpayer money on a grand scale.

With this historic opportunity to upgrade the nation’s infrastructure and to create much needed jobs comes the chance to make dramatic changes in the way government agencies think about project and risk management and oversight. In going beyond compliance, government organizations can help to make ARRA a success and extract more public value for every dollar spent.



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